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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/661,130	09/13/2000	Abraham R. Matthews	FORT-000300	7711
64128	7590	10/16/2007		
HAMILTON DESANCTIS & CHA			EXAMINER	
Michael A. DeSanctis			MANIWANG, JOSEPH R	
756 HARRISON ST.			ART UNIT	PAPER NUMBER
DENVER, CO 80206			2144	
			MAIL DATE	DELIVERY MODE
			10/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/661,130

Applicant(s)

MATTHEWS ET AL.

Examiner

Joseph R. Maniwang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-15, 17-20 and 22-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-15, 17-20 and 22-31 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date see Office Action.

- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. 20071002.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 04/29/07 and 09/29/07 were in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements were considered by the Examiner.

Specification

2. Examiner acknowledges the amendment to the Specification filed 09/29/07. The amendments have been entered into record and are proper. However, the Specification contains further informalities as detailed below. While an attempt to enumerate the various deficiencies of the Specification has been made, Applicant is advised to thoroughly review the Specification for any additional informalities and invited to make corrections as necessary.
3. The disclosure is objected to because of the following informalities:
 - a. The spacing of the lines of the specification is such as to make reading difficult (p. 11-21). New application papers with lines 1½ or double spaced on good quality paper are required.
 - b. The Specification contains numerous instances of generally narrative language (especially p. 11-20). For example, the Specification recites: "we will describe", "we will covers" (p. 11); "We will refer to", "We now look at" (p. 12); "we

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wish to have optimized" (p. 13); "and is also expected to be well debated!" (p. 20).

c. The Specification recites "Error! Reference source not found", the context of which cannot be understood (p. 16).

d. The Specification improperly contains figures (p. 16-21). The figures should be filed as separate drawings and renumbered as they overlap in number with the current Drawings filed 09/29/07. Additionally, the Brief Description of the Drawings should be amended to include any subsequent new figures.

e. The Specification contains section numbers and headings not consistent with the Specification as a whole (p. 11-20, especially p. 20).

f. The Specification references Figures 1-7 (p. 16), but appears to actually be referring to the improper figures in the Specification on p. 16-21.

2. Appropriate correction is required.

Drawings

3. The drawings were received on 09/29/07. These drawings are accepted. Additionally, Examiner acknowledges Applicant's request to cancel Figures 15-22 (Drawings, filed 09/13/00, p. 13-20).

4. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention (see Specification, p. 16-19). Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

Allowable Subject Matter

5. Claims 10-15, 17-20, and 22-31 are allowed.
6. The following is an examiner's statement of reasons for allowance:
7. The closest prior art is Salkewicz (U.S. Pat. No. 6,609,153), Rao et al. (U.S. Pat. No. 6,674,756), and Rekhter et al. (U.S. Pat. No. 6,463,061).
8. Salkewicz disclosed virtual routing functionality, inter alia, in Column 11, Lines 7-9, and Column 11, Lines 37-48. These logical "devices" were described as enabled to handle multiple virtual connections to neighboring terminal(s) (i.e., multiple devices), inter alia, in Column 11, Lines 16-36, and Column 12, Lines 40-64, as well as functionally aggregating traffic over both logical constructs and physical media. See, inter alia, Column 13, Lines 8-16. "Binding", as described and understood in the art "couples" connections to processes executing on the local hardware using an interface. Minimally, this allows VPN support on the public Internet (inter alia, Columns 7-8 and 14-15) and complete granularity of control over traffic flows in each, and between, particular VPN definitions (inter alia, Column 7, Lines 29-65). Lastly, a "system router" was clearly evident. See, inter alia, Column 8, Lines 40-42. Rao disclosed multiple virtual routers, wherein each router had distinct routing table(s) and available resource record(s). See, inter alia, Abstract. Further, each functional "router" offered connectivity to multiple VPN interfaces. See, inter alia, Abstract, and Figure 17. Utilizing the router to

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route traffic regarding network policies as well as specific connection parameters were also described, inter alia, in Figure 12. Selective VPN traffic filtering for aggregated flows was well known in the art. See, inter alia, Column 2, Lines 35-40. Multiple embodiments provide multiple routers, multiple terminals for each router; and multiple flows through each physical medium. See, inter alia, Column 9, Lines 30-44. Rekhter disclosed aggregated traffic flows between virtual multiple routing devices, multiple endpoint terminals, and multiple virtually defined networks. See, inter alia, Abstract, Figures 1 and 7, and Column 5, Lines 7-40. Again, binding is disclosed, providing logical connection association with particular process(es) and/or terminals. See, inter alia, Column 8, Lines 38-60. VPN definition/establishment, connection tunneling, both intra- and inter-VPN traffic, and virtual network connections, associated identifiers, and generic connective interfaces were also disclosed. See, inter alia, Columns 5, 7-8, and 21-22.

9. The prior art references of record do not teach alone or in combination all the limitations together within the independent claims 10, 18, 23, and 29. For example, the independent claims contain the limitation wherein a shared processing element of the plurality of processing elements is part of the first set of one or more of the plurality of processing elements and the shared processing element is part of the second set of one or more of the plurality of processing elements (claims 10 and 18). Additionally, the independent claims recite a VR-based switch having a plurality of processing elements and including a first server blade and a second server blade and each of the plurality of processing elements are associated with the first server blade or the second server

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blade, and wherein a VR of the first plurality of VRs terminates links on both the first server blade and the second server blade; and forwarding agents associated with the VR maintaining a replicated forwarding information base (claims 23 and 29). Therefore, the independent claims have allowable subject matter and are allowable over the prior art of record. The dependent claims of these claims are also allowable.

10. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

11. Applicant's arguments filed 09/29/07 with respect to claims 10-15, 17-20, and 22-31 have been fully considered and are persuasive. The rejection of the claims has been withdrawn. Claims 10-15, 17-20, and 22-31 have been allowed as detailed above.

12. Examiner further acknowledges Applicant's amendment to the Specification and Drawings, which are found to be proper. However, the Specification contains further deficiencies as detailed above. It is noted that although Applicant indicates in the Remarks that the embedded figures on p. 16-19 of the Specification would be removed and submitted as new figures, such an amendment cannot be found on record by Examiner as of the amendment filed 09/29/07. A detailed recodation of the necessary changes as well as additional informalities in the Specification is found above.

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Applicant is invited to amend the application as required in order to place the case in condition for allowance.

Conclusion

This application is in condition for allowance except for the following formal matters:

The Specification is objected to for the reasons set forth above. New Drawings are required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

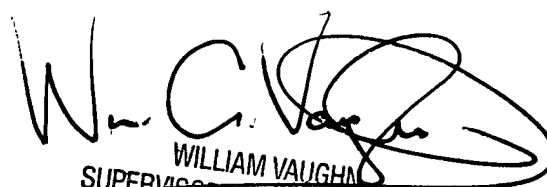
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph R. Maniwang whose telephone number is (571) 272-3928. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JM



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